

**TABLE 9.2**  
**CLIMATIC ZONE 99**

Mulch-till C Factors - High production (Corn 150 bu, Soybeans 45 bu.)

Corn after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.17	.14	.11	.09	.075	.065	.055		.18	.14	.11	.09	.075	.065	.055	
corn silage w/cover	.18	.15	.11	.09												
corn silage	.32	.30*							.34	.31*						
small grain-baled	.27	.22	.18	.16	.14				.29	.23	.19	.16	.15			
soybeans	.26	.22	.19	.17	.15				.28	.22	.19	.175	.16			
soybeans w/narrow row	.25	.21	.18	.16	.14				.27	.21	.19	.17	.16			
meadow	.09	.08	.07	.06					.14	.12	.10	.095				

Wide Row Soybeans after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.20	.16	.12	.095	.08	.07	.06		.21	.16	.12	.10	.08	.07		
corn silage w/cover	.24	.175	.135	.115	.10	.09	.08									
corn silage	.36	.34*							.38	.35*						
small grain-baled	.32	.26	.215	.185	.165				.38	.28	.23	.20	.17			
soybeans	.31	.255	.22	.205					.34	.26	.22	.20				
meadow	.08	.075	.065	.06					.14	.12	.105	.095				

Narrow Row Soybeans	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.14	.11	.08	.065	.055	.045	.04		.15	.11	.08	.065	.055	.045		
corn silage w/cover	.18	.13	.11	.09	.08	.07	.065									
corn silage	.27	.26*							.28	.27*						
small grain-baled	.23	.19	.16	.14	.125				.29	.21	.18	.16	.14			
soybeans w/narrow row	.21	.16	.13	.11	.095				.24	.17	.14	.13				
meadow	.06	.05	.045	.04					.10	.08	.072	.067				

\* - Residue levels will normally be below 10% cover.

**TABLE 9.2**  
**CLIMATIC ZONE 99**  
 Mulch-till C Factors - High production (Corn 150 bu, Soybeans 45 bu.)

Spring Small Grain (Baled) after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.039		.023	.018	.014	.01	.009		.05	.033	.025	.018	.015	.012	.009	
corn silage	.12	.09*							.13	.10*						
soybeans	.068	.052	.044	.038	.035	.032			.08	.06	.048	.04	.035			
soybeans w/narrow row	.065	.05	.04	.033	.03	.026	.024		.075	.055	.045	.035	.03			

Corn Silage after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.19	.15	.11	.09	.08	.07			.20	.15	.11	.09	.08	.07		
corn silage	.34	.32*							.36	.33*						
small grain-baled	.30	.25	.20	.175					.31	.26	.21	.18				
soybeans	.29	.24	.21	.19	.17				.30	.25	.22	.20				
soybeans w/narrow row	.28	.23	.20	.18	.16				.31	.24	.21	.19				
meadow	.089	.075	.067	.06					.13	.115	.10	.09				

Oats w/meadow after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.018		.01	.008	.006	.005	.004		.025	.016	.011	.009	.007	.005	.004	
corn silage	.078	.07*							.10	.08*						
soybeans	.035	.027	.023	.019	.017	.015			.05	.034	.028	.023	.02			
soybeans w/narrow row	.03	.025	.019	.016	.014	.012	.01		.048	.03	.024	.02	.016	.014		

Corn Silage w/cover after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.165	.125	.09	.07	.06	.05	.04									
corn silage w/cover	.16	.13	.10	.08	.06	.05	.04									
soybeans	.26	.195	.17	.15	.14	.13										
soybeans w/narrow row	.25	.19	.155	.14	.125	.115										

\* - Residue levels will normally be below 10% cover.

**TABLE 9.2**  
**CLIMATIC ZONE 99**

Mulch-till C Factors -Medium production (Corn 125 bu, Soybean 35 bu)

Corn after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.20	.17	.13	.11	.09	.08			.21	.17	.13	.11	.095	.085		
corn silage w/cover	.26	.20	.16	.14	.125											
corn silage	.36	.34*							.37	.35*						
small grain-baled	.33	.26	.22	.19	.17				.34	.27	.23	.20	.18			
soybeans	.30	.25	.22	.20	.19				.33	.25	.22	.20	.19			
soybeans w/narrow row	.29	.25	.22	.20	.19				.31	.25	.22	.19	.18			
meadow	.10	.09	.08	.07					.15	.13	.11	.10				

Wide Row Soybeans after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.24	.19	.15	.12	.10	.085	.075		.26	.19	.15	.12	.10	.09		
corn silage w/cover	.26	.22	.18	.15	.13	.12	.11									
corn silage	.41	.39*							.42	.40*						
small grain-baled	.37	.30	.25	.18	.16				.43	.32	.27	.23	.21			
soybeans	.34	.29	.26	.24					.37	.30	.27	.25				
meadow	.10	.085	.075	.07					.15	.13	.11	.11				

Narrow Row Soybeans	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.18	.14	.11	.09	.075	.06			.18	.13	.10	.082	.07	.06		
corn silage w/cover	.22	.18	.14	.12	.11	.10										
corn silage	.31	.31*							.32	.31						
small grain-baled	.28	.23	.20	.18	.17				.34	.25	.21	.19	.18			
soybeans w/narrow row	.24	.20	.18	.16	.15				.27	.20	.17	.16				
meadow	.075	.065	.055	.05					.11	.092	.081	.075				

\* - Residue levels will normally be below 10% cover.

**TABLE 9.2**  
**CLIMATIC ZONE 99**

Mulch-till C Factors -Medium production (Corn 125 bu, Soybean 35 bu)

Spring Small Grain (Baled) after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.048		.029	.022	.018	.014	.01		.055	.04	.03	.02	.023	.018	.015	.012
corn silage	.14	.11								.12						
soybeans	.08	.065	.054	.048	.045				.095	.07	.058	.051	.046			
soybeans w/narrow row	.075	.064	.053	.048	.045	.041			.09	.066	.055	.045	.04			

Corn Silage after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.23	.18	.14	.12	.10				.24	.18	.14	.12	.10			
corn silage	.40	.38*							.41	.39*						
small grain-baled	.36	.30	.25	.22					.37	.32	.26	.23				
soybeans	.34	.29	.26	.24					.35	.30	.27	.25				
soybeans w/narrow row	.34	.29	.26	.24					.36	.29	.25	.23				
meadow	.11	.09	.08	.075					.15	.13	.12	.11				

Oats w/meadow after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.022		.012	.009	.007	.005	.004		.028	.018	.013	.010	.008	.006	.005	
corn silage	.089	.08*							.10	.09*						
soybeans	.04	.03	.026	.024	.022				.055	.038	.031	.028	.025			
soybeans w/narrow row	.04	.032	.026	.024	.022				.052	.038	.031	.028	.026			

Corn Silage w/cover after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.22	.17	.13	.10	.09	.08										
corn silage w/cover	.26	.21	.16	.14	.12	.11										
soybeans	.31	.24	.21	.20	.19											
soybeans w/narrow row	.31	.24	.21	.195	.18											

\* - Residue levels will normally be below 10% cover.

**TABLE 9.2**  
**CLIMATIC ZONE 99**

Mulch-till C Factors -Low production (Corn 100 bu, Soybean 25 bu)

Corn after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.25	.21	.17	.14	.125	.11			.27	.215	.17	.145	.13	.115		
corn silage w/cover	.32	.26	.21	.17	.15											
corn silage	.44	.41*							.45	.42						
small grain-baled	.41	.32	.27	.25					.42	.33	.28	.25				
soybeans	.35	.30	.27	.25	.24				.38	.31	.27	.26				
soybeans w/narrow row	.34	.29	.26	.24	.23				.36	.30	.26	.24	.23			
meadow	.12	.11	.10	.09					.17	.15	.13	.12				

Wide Row Soybeans after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.30	.24	.19	.16	.14	.12			.32	.245	.195	.165	.14	.125		
corn silage w/cover	.32	.28	.22	.17	.15	.13	.12									
corn silage	.49	.48*							.50	.49*						
small grain-baled	.45	.38	.33	.30					.51	.39	.33	.30				
soybeans	.41	.35	.33						.44	.36	.34					
meadow	.13	.11	.095	.09					.19	.16	.14	.13				

Narrow Row Soybeans	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.22	.17	.13	.11	.09	.08			.23	.17	.13	.11	.09	.08		
corn silage w/cover	.25	.22	.17	.15	.13	.12										
corn silage	.37	.37*							.38	.37						
small grain-baled	.35	.29	.255	.235					.41	.31	.26	.23				
soybeans w/narrow row	.29	.23	.21	.19					.32	.25	.22	.20				
meadow	.083	.072	.065	.06					.13	.11	.095	.09				

\* - Residue levels will normally be below 10% cover.

**TABLE 9.2**  
**CLIMATIC ZONE 99**

Mulch-till C Factors -Low production (Corn 100 bu, Soybean 25 bu)

Spring Small Grain (Baled) after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.075		.044	.035	.029	.024	.02		.08	.062	.046	.036	.03	.025	.02	
corn silage	.18	.16*								.17*						
soybeans	.11	.09	.08	.075	.07				.12	.098	.085	.078	.072			
soybeans w/narrow row	.10	.085	.075	.067	.064				.12	.093	.08	.071	.065			

Corn Silage after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.32	.25	.20	.17	.15				.33	.25	.20	.175	.155			
corn silage	.51	.50*							.52	.51*						
small grain-baled	.47	.39	.33	.30					.48	.41	.35	.31				
soybeans	.44	.38	.35	.33					.45	.39	.36	.34				
soybeans w/narrow row	.42	.36	.33	.32					.41	.34	.31	.29				
meadow	.14	.12	.11	.10					.18	.17	.15	.14				

Oats w/meadow after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.025		.013	.010	.008	.007			.036	.023	.015	.012	.010	.008	.007	
corn silage	.10	.095*							.11	.10						
soybeans	.043	.035	.031	.029	.027				.06	.043	.038	.034				
soybeans w/narrow row	.04	.033	.027	.025	.023				.055	.039	.033	.029				

Corn Silage w/cover after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn	.28	.22	.17	.14	.12											
corn silage w/cover																
soybeans	.39	.29	.26	.24												
soybeans w/narrow row	.36	.28	.25	.23												

\* - Residue levels will normally be below 10% cover.